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ASEE



American Society for Engineering Education

ARPA-NDSEG FELLOWSHIP PROGRAM

GRANT N00014-89-J-3204

GRANT N00014-93-I-1199

GRANT MDA972-93-I-0039 (ARPA)

THIS REPORT PERIOD: 1 AUGUST 1992 - 30 SEPTEMBER 1993

THIRD MANAGEMENT AND DEMOGRAPHIC REPORT

Submitted and Prepared by:

Jeffrey P. Jarosz

Program Manager, Projects Department

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American Society for Engineering Education

ARPA-NDSEG Graduate Fellowship Program

Grant N00014-89-J-3204, 1 August 1989-31 August 1995

Grant N00014-93-1-1199, 1 September 1993-31 August 1996

Grant MDA972-93-1-0039, 1 September 1993-31 August 1996

This report period: 1 October 1992 - 30 September 1993

Third Management and Demographic Report

Submitted and prepared by: Jeffrey P. Jarosz, Program Manager,
Projects Department

1. Introduction

Grant N00014-89-J-3204, as subsequently amended, provides \$6,950,307 for the support of this program from August 1, 1989 through August 31, 1995.

Supplementary grant N00014-93-1-1199 provides \$1,786,854 for the support of the program from September 1, 1993 through August 31, 1996.

An additional grant, MDA972-93-1-0039, ^{ARPA} provides \$115,000 for the support of the program, also from September 1, 1993 through August 31, 1996.

This report serves as ASEE's third management and demographic report as well as the final report for the 1993 program. It will provide information concerning the post-award administration for the first, second, third, fourth and fifth classes of fellows.

Supplementary documentation is attached as follows:

- A. Detailed appointment letter
- B. Letter to department chairperson
- C. Chairperson's institutional certification form
- D. Administrative control form
- E. Fellow's summer plan form
- F. Adviser's certification of fellow's progress
- G. Memorandum to bursars
- H. 1993 financial statement
- I. Memorandum and form concerning direct deposit of stipends
- J. Analysis of new fellows

2. Administration

ASEE's responsibilities in the administration of the ARPA-NDSEG

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fellowship program begin after ARPA has made its selections. ARPA awarded fellowships to 22 students in spring 1989, to 13 students in spring 1990, to 21 students in spring 1991, to 14 students in spring 1992, and to 14 students in spring 1993, for a total of 84 fellowships to date. Each spring, after ARPA made its selections, ASEE mailed each new fellow a detailed appointment letter. Attachment A is a sample appointment letter, mailed on June 15, 1993.

To establish an administrative file for each fellow, ASEE sent a letter to the chairperson of the department in which the fellow would study. This letter outlined the benefits to the department as well as its obligations (attachment B). The department chairperson was requested to complete and return an institutional certification (attachment C).

ASEE acquired the information necessary to insure prompt payment of monthly stipends by sending each fellow an administrative control form (attachment D).

In order to secure fellowship support for the second and third years, students were required to complete a progress form and summer plan (attachment E), and a faculty adviser was asked to certify the student's progress (attachment F).

New fellows were requested to forward a "memorandum to bursar's office" (attachment G) to the appropriate billing office of their institutions. The memorandum authorized the bursar to bill ASEE directly for the student's tuition.

3. Financial management and reporting

Three grants plus amendments have been awarded to conduct the program from August 1, 1989 through August 31, 1996. A total of \$8,852,161 has been authorized to conduct the program for five groups of fellows (three years for each group) through August 31, 1996. ASEE periodically submitted vouchers for advance payment of student support and administrative expenses. For N00014-89-J-3204 these costs plus stipends, tuitions, mandatory fees, and department allowances totalled \$1,473,718.31 for fiscal year 1993 and \$4,756,346.58 for the entire grant period. For N00014-93-1-1199 costs totalled \$41,969.25. The ARPA-NDSEG fellowship program for FY93 cost a total of \$1,515,687.50.

The number of students on tenure in the spring of 1994 was 40.

The financial statements are attachment H.

4. Banking

Since September 1990, stipends have been deposited electronically into fellows' bank accounts. Fellows can elect to have stipends

deposited into checking or savings accounts. They do not have the option of receiving "live checks". Feedback from the fellows concerning the direct deposit service is uniformly positive. Funds are available to fellows on the first working day of the month. The memorandum mailed to fellows concerning direct deposit and the required authorization agreement are attachment I.

5. Analysis of ARPA-NDSEG fellows

ARPA awarded twenty-two fellowships in the spring of 1989, thirteen fellowships in the spring of 1990, twenty-one fellowships in the spring of 1991, fourteen fellowships in the spring of 1992, and fourteen fellowships in the spring of 1993. Although the awards are made in the spring, the students do not commence tenure until the autumn - September or October. To date, ARPA has awarded 84 NDSEG fellowships. Only seven students - Jared Bronski, Carmelita Ervin, Bruce Forstall, Susan Fuerlinger, William Hosch, James Mullner, and Stephen Speer - have dropped out of the program. There was also one "no-show": David Yu accepted the fellowship in April 1992, but then withdrew in July 1992. He wrote that he decided against graduate school for personal reasons.

There are currently 40 fellows on tenure.

ASEE has analyzed the ARPA-NDSEG fellows in three ways. First, it has examined the new class of fellows, those appointed in 1993. Second, it has cumulative statistics on all five classes. Third, it has follow-up information on the two classes of fellows who have completed their tenure.

NEWLY APPOINTED FELLOWS: Attachment J lists the 14 new fellows (those appointed in spring 1993) by surname and first name. The list provides their undergraduate and graduate institutions, age, race (white=not a member of an under-represented minority group), undergraduate grade point average, rating by undergraduate instructors, discipline, sex and home state.

The 14 new fellows represent 12 different undergraduate institutions (two fellows graduated from UC Berkeley and two from Harvard). They selected 8 different graduate institutions. The most popular graduate schools are Stanford (four new fellows), UC Berkeley (three new fellows), and MIT (two new fellows).

The fellows range in age from 22 to 33, with the median age being 24.

Thirteen of the fellows (92%) are Caucasians or Orientals. One fellow is a member of an under-represented minority group in science and engineering, specifically, an African American. Under-represented minorities constitute 7% of ARPA's new fellows.

The undergraduate grade point averages for ARPA's new fellows ranged from 3.62 to 4.00. (Two of the fellows claimed perfect 4.0s.) The median GPA was an impressive 3.85.

The instructors of the 14 new ARPA fellows at their undergraduate institutions rated them very highly. Seven of the fellows (50%) received reference evaluations marked "truly exceptional: equivalent to the very best you have known - a person who, in your experience, appears once every few years." Five fellows were rated as "outstanding: comparable to the best student in a current class - highest 5%". The remaining two fellows were not rated on the standard scoresheets.

New fellowships were awarded in five different disciplines. The most popular discipline among the new fellows is electrical engineering. There are four new fellows in electrical engineering, three in industrial engineering, three in mathematics, and three in materials science.

Thirty-five percent of the new fellows are women, and 64% are men. They represent 11 states. The most represented home states are California and Michigan. Three new fellows come from California and two from Michigan.

CUMULATIVE DATA: More significant than the statistics for any given year are the statistics for a five-year period. Since 1989 ARPA has appointed a total of 84 fellows.

Ninety percent of ARPA's NDSEG fellows are Caucasian or Oriental. Nine percent are members of under-represented minority groups: 4% are African Americans, 3% are Hispanic, and 1% are American Indians.

Sixty-eight percent of ARPA's NDSEG fellows are male, and 31% are female.

ARPA has emphasized materials science and engineering over all other disciplines. Twenty-six percent of ARPA's NDSEG fellows are pursuing PhDs in materials science, 21% are studying mathematics, 19% are in electrical engineering, 15% are in chemistry, 14% are in manufacturing sciences and engineering, and 5% are in computer science.

The most represented home states are New York and California.

EX-FELLOWS: As the fourteen students who were appointed in spring 1993 began their tenure as ARPA fellows, the second group of students - those who were appointed in spring 1990 - completed the program. (NDSEG funding is for three years.)

Of the 35 students who were appointed in the first two years (1989 and 1990), three withdrew early (Bronski, Forstall and Hosch). Thirty-two students completed the three-year program successfully. When their tenure ended, ASEE mailed them a

farewell letter and a form. The letter encouraged them to keep ASEE informed of their whereabouts. The form requested their mailing address, telephone number, and immediate plans; it also asked whether they plan to continue their pursuit of the PhD full time, study part time and work part time, or abandon their pursuit of the PhD. The forms which have returned to ASEE indicate that almost all ex-fellows are continuing their pursuit of the PhD full time and anticipate receiving them in approximately one more year.

Two fellows who were appointed in spring 1991 and could have received funding through August 1994 received their PhDs and completed the program a year early. Ellen Eide received her PhD in September 1993 and became a scientist for Bolt, Beranek and Newman, Inc. Her dissertation title was "A Linguistic Feature Representation of the Speech Waveform." Jane M. Simmons also received her PhD in September 1993 and became a member of the technical staff of AT&T Bell Laboratories. Her dissertation was entitled "End-to-End Reliable Communication in Data Networks". Dr. Simmons wrote: "Thank you for the fellowship; the program was very well run."

ASEE has collected the following data concerning the 35 fellows who were appointed in spring 1989 and spring 1990:

(1989) Tao Alter - computer science; earned PhD from MIT in 1994
 David Blair - mathematics; earned PhD from Brandeis in 1993
 Jared Bronski - mathematics; enrolled at Princeton but withdrew from program early
 John Daugherty - chemical engineering; earned PhD from UC Berkeley in 1993
 Paul Desch - materials science; earned PhD from Illinois Institute of Technology in 1993
 Bruce Forstall - computer science; earned master's degree from UC Berkeley, then withdrew from program
 Burt Fowler - electrical engineering; earned PhD from University of Texas at Austin in 1992, now on technical staff of Sematech
 Gavin Gaynor - chemical engineering; completed three years at North Carolina State University; no current information
 Christopher Hoppel - materials science; earned PhD from Pennsylvania State University in 1993, acknowledged ARPA's support in three published papers
 John Horigan - materials science; completed three-year fellowship but did not earn a PhD; currently a graduate rotation engineer for Intel Corporation
 William Hosch - withdrew from program early
 Todd Hufnagel - materials science; earned PhD from Stanford in 1994
 Joseph Konstan - computer science; completed three years of fellowship; no current information
 Michael Liberatore - materials science; earned PhD from MIT in 1993
 Todd McComb - mathematics; earned PhD from Rensselaer Polytechnic Institute in 1992; no current information

Michael Nagorka - materials science; earned PhD from University of California-Santa Barbara in 1993
 Tan Phan - electrical engineering; earned PhD from North Carolina State University in 1994
 H. Scott Roy - computer science; earned PhD from Stanford in 1993
 Anne Skaja-Robinson - chemical engineering; earned PhD from University of Illinois in 1993
 David Storch - materials science; earned PhD from Northwestern in 1993
 Donnell Walton - electrical engineering; earned PhD from University of Michigan in 1994
 Anthony Yen - electrical engineering; earned PhD from MIT in 1991, now a member of the technical staff of Texas Instruments (1990)
 Mary Boyd - electrical engineering; earned PhD from MIT in 1994
 Frank Chance - operations research; earned PhD from Cornell in 1993, currently a postdoc scientist at Cornell
 Katherine Chen - materials science; MIT; anticipates PhD in 1995
 Carlos Gonzalez - industrial engineering; earned PhD from North Carolina State University in 1994
 Brian Grady - chemical engineering; earned PhD from University of Wisconsin-Madison in 1993
 Douglas Hague - materials science; earned PhD from Penn State in 1994
 L. Diane Hoffoss - mathematics; University of California-Santa Barbara; anticipates PhD in 1995
 Marilyn Huff - chemical engineering; earned PhD from University of Minnesota in 1994
 Tyler Jarvis - mathematics; earned PhD from Princeton in 1994
 Stephen Keckler - electrical engineering; MIT; anticipates PhD in 1996
 David Romano - mathematics; completed three years of fellowship at UC Berkeley; no current information
 Pamela Sears - chemical engineering; completed three years of fellowship at UC Berkeley; no current information
 Donald Wissuchek - materials science; University of California at Santa Barbara; anticipates PhD in 1995

The former fellows' appreciation of ARPA's support is reflected in the following comments.

Burt Fowler wrote: "I would like to take this opportunity to thank you, your coworkers and all of those involved in the NDSEG fellowship program. The fellowship was a great help to my wife and me for the past three years. Once again, thank you, and keep up the good work."

Carlos Gonzalez wrote: "Thank you very much for the excellent service your office offered me during the past three years. I can sincerely say that my experience as an NDSEG fellow was very positive. Once again thank you for always begin prompt to my requests and especially for always sending the stipend on time the first day of the month!"

Diane Hoffoss wrote: "Thank you for giving me such a wonderful opportunity to pursue a PhD in mathematics with full concentration without having to worry about supporting myself. I have accomplished much more in these three years than I would have with the additional responsibility of being a teaching assistant. I've used the time to foster a strong background in topology, and now that my coursework is completed I'm much more able to devote some time to teaching to support my studies. I'm very grateful for the powerful start you have given me in my graduate studies. I feel confident as I begin my dissertation research."

Anthony Yen wrote: "I am currently employed as a member of the technical staff at the Semiconductor Process and Design Center of Texas Instruments Inc., working on advanced lithography technology. This technology is critical to the survival and success of the US semiconductor industry, an industry vital to our national defense. Therefore, in my case, the purpose of the NDSEG fellowship - to increase the supply of US citizens trained in disciplines of science and engineering of military importance - has been fulfilled."



American Society for Engineering Education

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June 15, 1993

Mr. Edward G. Anderson
1621 Robindale
Dearborn, Michigan 48128

Dear Edward:

Congratulations on your selection as an ARPA-NDSEG Graduate Fellow. Your selection was made in the face of heavy competition. You were one of many well qualified applicants to receive one of the 14 fellowships awarded.

The American Society for Engineering Education (ASEE) has been charged by ARPA with administrative responsibility for this graduate fellowship program. ASEE, founded in 1893, is a non-profit educational association of engineering schools, engineering teachers, and industry and government representatives. The Projects Department of ASEE will handle most of the administrative aspects of your fellowship. The administrative burden on you will be very light, but be sure to respond promptly to all administrative requirements. Stipends, tuitions and allowances will be withheld if administrative requirements are not met.

Your fellowship file will be maintained in this office. Always take care to notify ASEE promptly of any changes in your address. Your stipend payments will begin the month you start attending classes and will be paid only for a full month of full-time, degree-related study. The stipend will be transferred electronically to your bank on the first working day of each month. If you begin classes at the end of September, your first stipend will be disbursed at the beginning of October. It would be very advisable, therefore, to report to graduate school with some alternative funds to see you through the first few weeks. If you maintain academic progress and full-time enrollment, you will receive twelve monthly stipends of \$1,250.00, twelve stipends of \$1,333.33, and twelve stipends of \$1,416.66. See the enclosed page titled "Stipends and Banks" for more information concerning your stipends.

Pending receipt of certification that you have been admitted to a graduate program and will begin your tenure under this fellowship on a specified date in autumn 1993, ASEE will pay your tuition and mandatory fees directly to the institution at which you will study. An allowance of \$2,000 will be given to the department in which you will study, to be used at the discretion of the department chairperson. The allowance will be paid at the end of the academic year, provided you have made satisfactory progress toward your degree, and after three documents have been submitted - a transcript/grade report for the academic year, an adviser's certification form, and a fellow's summer plan form.

The enclosed administrative control form asks for the name and address of your department chairman, to whom an appropriate certification form will be sent for completion and return to ASEE. It may be advisable to check with your department chairperson in order to make certain that he/she has filled out the certification form and returned it to ASEE. No stipends or tuitions will be paid if your chairperson has not certified your enrollment.

The fellowship department of ASEE has a direct telephone number of 202-986-8516. If it is busy you can also dial 202-986-8525.

I would like to know the name of your faculty adviser as soon as you have been assigned to one. If you already have an adviser or know who your adviser will be, please enter this information on the enclosed administrative control form. If you do not yet know who your adviser will be, send me the control form anyway and give me a call when you do know.

I would appreciate the return of the enclosed administrative control form as soon as possible.

Also enclosed is a memorandum for registrars. The memorandum should be delivered or mailed by you to the registrar/bursar of your graduate school. This will authorize the registrar or bursar to bill ASEE for your tuition and mandatory fees. Retain a copy of the bursar's memo for your own files, because it will not be sent each year.

You are entitled to three years of support (tuition plus stipend) within a three-year period beginning in autumn 1993. It is your responsibility to keep the billing agency of your university informed of your funding status. For example, if you go off ARPA-NDSEG tenure during the summer months, you must inform your bursar as well as ASEE. ASEE will be glad to confirm your funding status by telephone if you or your institution need clarification, but it will not send funding guarantees to your university each semester.

All amounts provided by a fellowship which are used for living expenses or travel must be reported as income. Since the grantor of a fellowship does not withhold tax, fellows must make estimated tax payments. Estimated tax payments can be made annually or quarterly. Consult IRS publication 520 for details.

Also enclosed are two copies of a memorandum concerning patents and inventions. Read the memorandum and retain one copy for future reference. Please sign, date, and return the other copy to me prior to starting your graduate program. At the end of your tenure as an ARPA fellow you will be required to report any inventions to ASEE on the form provided; but for now, sign and return a copy of the memorandum, not the report form.

Edward, I look forward to making your fellowship tenure a rewarding experience. Most students selected for the ARPA-NDSEG program have their choice of several prestigious fellowships. I believe that in accepting ARPA's offer, you have made the right choice. A survey of NDSEG fellows who completed the program which you are now starting revealed an extremely impressive list of publications in archival journals, patents, grants, conference presentations, and other accomplishments. One fellow remarked: "I would have completed a PhD without the NDSEG fellowship but would not have reached the same professional level if I were faced with the restrictions and constant struggles for funds. It is one of the best sources of graduate funding available. I am proud to have been an NDSEG fellow."

Yours truly,



Jeffrey P. Jarosz
Program Manager
Projects Department

enclosures:

Fellowship Administrative Control Form
Memorandum for Registrar or Bursar
"Stipends & Banks"
Authorization Agreement for Direct Deposit
Patent Memorandum (2)
Patent Report Form

cc: B. Wilcox, ARPA

ASEE



American Society for Engineering Education

MEMORANDUM

FROM: American Society for Engineering Education

TO: Participants in the Department of Defense Graduate Fellowship Program

SUBJECT: Patents, Inventions, Innovations

1. Persons selected to participate as Fellows in the Department of Defense Graduate Fellowship Program are required to comply with the provisions of the "Patent Rights-Retention by the Contractor (June 1989)" clause of the Federal Acquisition Regulation (FAR), Part 52.227-11, and are considered subcontractors to the American Society for Engineering Education.
2. Fellows are required, in accordance with the Patent Rights clause, to report any invention made, ie., conceived or actually reduced to practice, during the period covered by their performance in the Fellowship Program. Invention means any discovery or innovation that may be patentable or otherwise protectable under U.S. patent law.
3. Any invention, as defined hereinabove, is to be reported to the Senior Patent Attorney at the Office of the Chief of Naval Research, Code 00CC1; 800 North Quincy Street, Arlington, Virginia 22217-5000.
4. At the conclusion of the period of performance under the Fellowship Program, each Fellow is required to provide an abstract to ASEE, listing all inventions made and/or reported during the performance period, or stating that there were none. For convenience, the enclosed form may be used in reporting inventions to ASEE.
5. Please sign and return this form to Jeff Jarosz, DOD Program Manager.

NAME: _____

SIGNATURE: _____

DATE: _____

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American Society for Engineering Education

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4. At the conclusion of the period of performance under the Fellowship Program, each Fellow is required to provide an abstract to ASEE, listing all inventions made and/or reported during the performance period, or stating that there were none. For convenience, the enclosed form may be used in reporting inventions to ASEE.
5. Please retain this copy for reference.

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AMERICAN SOCIETY FOR ENGINEERING EDUCATION

DOD GRADUATE FELLOWSHIP

PATENT REPORT FORM

[] Pursuant to the "Patent Rights--Retention by the Contractor (June 1989)" clause of the FAR Part 52.227-11 and the "Memorandum to Participants in the Department of Defense Graduate Fellowship Program", the following inventions were made and reported during the period of my Fellowship appointment.

<u>INVENTION TITLE</u>	<u>INVENTORS</u>	<u>DATE OF DISCLOSURE TO IP OFFICE</u>
-------------------------------	-------------------------	---

_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____
_____	_____	_____

[] No inventions were made.

NAME: _____

SIGNATURE: _____

DATE: _____

NOTE: Please return this form to Jeff Jarosz, DOD Fellowship manager.

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**PHONE (202) 331-3525
FAX (202) 265-8504**

ASEE



American Society for Engineering Education

July 15, 1993

Mr. James Orlin
Sloan School of Management
Room E52-003
Massachusetts Institute of Technology
50 Memorial Drive
Cambridge, Massachusetts 02139

Dear Mr. Orlin:

Mr. Edward G. Anderson has been awarded a National Defense Science and Engineering Graduate (NDSEG) fellowship. According to information supplied by him, he has been admitted to graduate study in your department.

Under the terms of the fellowship, the institution in which the Fellow is enrolled for full-time graduate studies is entitled to full tuition payable by ASEE to the institution at the beginning of each semester or quarter. In return for this payment, the institution is expected not to invoice the student for tuition and fees normally charged to students of similar academic standing. In addition, \$2,000 will be paid to the department in which the student is pursuing his degree payable at the end of the academic year.

Enclosed is a brief certification which should be returned as soon as possible so that the stipends, tuition and institutional allowance can be paid.

Questions concerning this program may be addressed to me at this special telephone number: 202/986-8516.

Sincerely,

Jeffrey P. Jarosz
Program Manager
Projects Department

enclosure

cc: J. Crowley, ARPA

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AMERICAN SOCIETY FOR ENGINEERING EDUCATION

DOD GRADUATE FELLOWSHIP

INSTITUTIONAL CERTIFICATION

This is to certify that (Name of DOD Fellow) _____

has been admitted to graduate study in (Department) _____

and will begin, or has begun, his/her studies on (Date) _____

Department Chairman Signature: _____

Information about academic progress of the DOD Fellow will be provided upon request by:

NAME: _____

DEPARTMENT: _____

TELEPHONE NUMBER: _____

The institutional allowance should be made payable to: _____

The institutional allowance should be mailed to: _____

NOTE: Please return this form to Jeff Jarosz, DOD program manager.

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**PHONE (202) 331-3525
FAX (202) 265-8504**

**AMERICAN SOCIETY FOR ENGINEERING EDUCATION
DEPARTMENT OF DEFENSE GRADUATE FELLOWSHIP
FELLOW'S ADMINISTRATIVE CONTROL FORM**

NAME OF FELLOW: _____

FELLOWSHIP INSTITUTION: _____

DEPARTMENT: _____

DEPARTMENT CHAIRMAN: _____

DEPARTMENT ADDRESS: _____

FACULTY ADVISOR: _____

ADVISOR'S ADDRESS: _____

ADDRESS TO WHICH MONTHLY STIPEND STATEMENTS SHOULD BE SENT:

NOTE: Please return with this form or separately four glossy, black and white, head and shoulders photographs, preferably not smaller than 3x5 to Jeff Jarosz, DOD program manager.

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May 1, 1993

MEMORANDUM

TO: ONR-ASEE Fellows
ONR-NDSEG Fellows
DARPA-NDSEG Fellows

FROM: Jeff Jarosz, Program Manager, Contracts and Grants

SUBJECT: Summer Plans/Certification of Progress

The Department of Defense requires evidence that you are making satisfactory progress in your pursuit of a PhD. Therefore, please arrange for me to receive an official grade report or transcript for academic year 1992-1993.

In addition, I must know what your plans are for this summer. You will recall that stipend payments will continue during the summer only if you are engaged in full-time, degree-related study/research. Kindly complete and return the enclosed form dealing with summer plans.

Please be prompt in providing the information requested. A form will be mailed to your adviser asking him/her to certify your progress. You should check with your adviser to be sure that his/her certification form is returned to ASEE promptly, also. Summer stipends, tuitions and your department's \$2,000 allowance will be withheld pending receipt of these three documents (summer plan form, grade report/transcript, adviser's form).

All three documents are due on June 1, 1993.

In case forms are lost or misplaced, duplicates may be requested. Duplicates will be sent by first class mail only (no faxes).

enclosure

cc: D. Hughes, ONR
B. Wilcox, DARPA



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ONR-ASEE FELLOWSHIP ONR-NDSEG FELLOWSHIP DARPA-NDSEG FELLOWSHIP

{ } I do not plan to continue my studies during the summer; therefore, please discontinue my stipend payments during that three-month period.

{ } I plan to remain at the university and continue my studies. The following courses/studies are anticipated:

{ } I plan to continue my studies at one of the Navy R&D centers and have requested that the program coordinator of the center notify you in writing of my starting and ending dates.

Name of R&D center _____

NAME _____

SIGNATURE _____

DATE _____

Kindly return this form to Jeff Jarosz by June 1.

NOTE: If you are flying to a Navy R&D center for summer research, you must purchase the ticket from the Connections travel agency.



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May 1, 1993

MEMORANDUM

To: Advisers of Graduate Fellows Funded by the Department of Defense

From: Jeff Jarosz, Program Manager, Contracts and Grants

Subject: Certification of Progress

Your name has been given to this office as the academic adviser to the PhD candidate identified on the attached form. The Department of Defense has asked that you verify the satisfactory progress of the candidate and indicate the prognosis for future success.

Kindly complete the attached form. This will enable ASEE as the administrator of the fellowship to fulfill its obligations to the fellows and to the Department of Defense.

Thank you in advance for your prompt cooperation (the fellow's June 1 stipend and the department's \$2,000 allowance will be withheld pending receipt of the certification).

enclosure

cc: D. Hughes, ONR
 B. Wilcox, DARPA



American Society for Engineering Education

11 Dupont Circle, Suite 200 • Washington, D.C. • 20036-1207 • Tele: (202) 986-8500 • Fax: (202) 265-8504

DEPARTMENT OF DEFENSE FELLOWSHIP PROGRAM

Adviser's Certification of Progress

1. The above noted PhD candidate is:

☐ progressing behind schedule.

☐ progressing on schedule.

☐ progressing ahead of schedule.

2. The candidate has informed me and I support his/her plans this summer to:

☐ continue his/her full-time, degree-related study/research at this institution.

☐ discontinue his/her study during the summer.

☐ continue his/her study at the following Navy laboratory:

☐ I do NOT support the candidate's summer plans.

3. Comments about the candidate

NAME _____

SIGNATURE _____

DATE _____

Kindly return this form to Jeff Jarosz by June 1. This once-a-year academic report is required for renewal of the candidate's fellowship.



Attachment G

American Society for Engineering Education

11 Dupont Circle, Suite 200 • Washington, D.C. • 20036-1207 • Tele: (202) 986-8500 • Fax: (202) 265-8504

June 15, 1993

MEMORANDUM

To: Bursar's Office

From: Jeffrey P. Jarosz, Program Manager, Projects Department

Subject: Department of Defense Fellowship

The person noted below is the recipient of a National Defense Science and Engineering Graduate (NDSEG) Fellowship and has selected your school at which to study for the PhD. The award includes full tuition and mandatory fees normally charged to other graduate students in the same department. Payment of these expenses will be made by the American Society for Engineering Education (ASEE) directly to your institution, provided the fellow is enrolled for full-time, degree-related graduate study or research and maintains satisfactory academic progress.

Please invoice ASEE each semester/quarter/summer rather than for an entire year. Please retain this memorandum in your files - notices will not be sent each semester.

The duration of the fellowship is three years, from autumn 1993 to summer 1996 inclusive. It is the fellow's responsibility to keep track of his/her funding and to keep your office informed of his/her status.

NDSEG Fellowship Recipient:

Mr. Edward G. Anderson
1621 Robindale
Dearborn, Michigan 48128

Attachment H

AMERICAN SOCIETY FOR ENGINEERING EDUCATION

INTERIM FINANCIAL REPORT
10/01/92-9/30/93

GRANT: N00014-89-J-3204
GRANT PERIOD: 8/1/89-8/31/96
AMOUNT AUTHORIZED: \$6,950,307
AMOUNT AVAILABLE: \$6,731,000

USE ACCOUNT # PR11

	1st QUARTER 01-Oct-92 31-Dec-92	2nd QUARTER 01-Jan-93 31-Mar-93	3rd QUARTER 01-Apr-93 30-Jun-93	4th QUARTER 01-Jul-93 30-Sep-93	TOTAL 01-Oct-92 30-Sep-93
ADMINISTRATIVE EXPENSES:					
SALARIES	\$9,662.35	\$8,471.07	\$7,305.35	\$11,454.98	\$36,893.75
TEMPORARY SALARIES	0.00	0.00	0.00	0.00	0.00
BENEFITS @ 38.49%	3,719.04	3,260.51	2,811.83	4,409.02	14,200.40
POSTAGE	25.88	34.92	49.99	66.82	177.61
EXPRESS/COURIER	75.00	36.80	0.00	0.00	111.80
TELEPHONE	194.02	0.00	1.82	3.30	199.14
TOLLS/FAX	0.00	1.52	0.00	2.26	3.78
ACCOUNTANTS	0.00	135.41	0.00	0.00	135.41
CONSULTANT/HONORARIA	373.46	0.00	0.00	0.00	373.46
OTHER PROF. SERVICES	147.55	257.54	135.29	96.41	636.79
SUPPLIES	13.48	0.00	15.00	0.00	28.48
MACHINE MAINT./RENTAL	0.00	0.00	1,239.46	326.05	1,565.51
PRINTING	16.20	0.00	0.00	0.00	16.20
PHOTOCOPYING	0.00	0.80	1.77	1.10	3.67
TRAVEL	0.00	95.51	393.67	6.25	495.43
COMMITTEE TRAVEL	0.00	819.85	(34.80)	0.00	785.05
TOTAL DIRECT ADMN. COST	14,226.98	13,113.93	11,919.38	16,366.19	55,626.48
INDIRECT @ 58.19%	8,278.68	7,631.00	6,935.89	9,523.49	32,369.05
TOTAL ADMINISTRATIVE COST	\$22,505.66	\$20,744.93	\$18,855.27	\$25,889.68	\$87,995.54
PARTICIPANT EXPENSES:					
STIPEND	242,916.05	182,749.54	178,832.88	143,416.23	747,914.70
TUITION & FEES	126,977.76	153,172.73	159,422.32	110,235.26	549,808.07
DEPARTMENT ALLOWANCE	0.00	0.00	88,000.00	0.00	88,000.00
TOTAL PARTICIPANT EXPENSE	\$369,893.81	\$335,922.27	\$426,255.20	\$253,651.49	\$1,385,722.77
TOTAL PROGRAM EXPENSE	\$392,399.47	\$356,667.20	\$445,110.47	\$279,541.17	\$1,473,718.31

AMERICAN SOCIETY FOR ENGINEERING EDUCATION

INTERIM FINANCIAL REPORT
01/01/92-9/30/93

GRANT: N00014-93-1-1199
GRANT PERIOD: 9/1/93-8/31/96
AMOUNT AUTHORIZED: \$1,786,854
AMOUNT AVAILABLE: \$260,000

SEE ACCOUNT: #PR1103

	1st QUARTER 01-Oct-92 31-Dec-92	2nd QUARTER 01-Jan-93 31-Mar-93	3rd QUARTER 01-Apr-93 30-Jun-93	4th QUARTER 01-Jul-93 30-Sep-93	TOTAL 01-Oct-92 30-Sep-93
<u>PARTICIPANT EXPENSES:</u>					
STIPEND	0.00	0.00	0.00	26,250.00	26,250.00
TUITION & FEES	0.00	0.00	0.00	15,719.25	15,719.25
DEPARTMENT ALLOWANCE	0.00	0.00	0.00	0.00	0.00
TOTAL PARTICIPANT EXPENSE	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$41,969.25</u>	<u>\$41,969.25</u>
TOTAL PROGRAM EXPENSE	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$0.00</u>	<u>\$41,969.25</u>	<u>\$41,969.25</u>
TOTAL RECEIVED	260,000.00				
TOTAL EXPENSES	<u>41,969.25</u>				
	218,030.75				

AMERICAN SOCIETY FOR ENGINEERING EDUCATION

TERIM FINANCIAL REPORT
1/89-9/30/93

GRANT: N00014-89-J-3204
GRANT PERIOD: 8/1/89-8/31/96
AMOUNT AUTHORIZED: \$6,950,307
AMOUNT AVAILABLE: \$6,731,000

SEE ACCOUNT # PR11

	FY89 01-Aug-89 30-Sep-89	FY90 01-Oct-89 30-Sep-90	FY91 01-Oct-90 30-Sep-91	FY92 01-Oct-91 30-Sep-92	FY93 01-Oct-92 30-Sep-93	TOTAL 01-Aug-89 30-Sep-93
ADMINISTRATIVE EXPENSES:						
SALARIES	\$335.25	\$13,858.56	\$29,582.52	\$46,785.85	\$36,893.75	\$127,455.93
TEMPORARY SALARIES	0.00	9,944.24	243.12	83.73	0.00	10,271.09
BENEFITS	111.84	4,996.95	10,161.59	16,875.66	14,200.40	46,346.54
POSTAL SERVICE	12.70	259.27	247.32	289.39	177.61	986.29
PRESS & FREIGHT	0.00	0.00	25.16	60.95	111.80	197.91
TELEPHONE	0.00	163.54	273.65	1,277.58	199.14	1,913.91
TELETYPE/FAX	0.00	0.00	0.00	0.00	3.78	3.78
ACCOUNTANTS FEES	0.00	0.00	4,425.99	1,496.60	135.41	6,058.00
CONSULTANTS	0.00	0.00	523.58	10,641.24	373.46	11,538.28
PATENT/COPYRIGHT	0.00	0.00	720.00	100.20	0.00	820.20
COMP./OTHER PROF. SERVIC	0.00	0.00	2,340.68	20,711.54	636.79	23,689.01
SUPPLIES	0.00	703.01	564.53	77.71	28.48	1,373.73
REGISTRATION FEES	0.00	0.00	0.00	110.00	0.00	110.00
MACHINE RENTAL/MAINT	0.00	0.00	718.39	0.00	1,565.51	2,283.90
SMALL EQUIPMENT	0.00	0.00	0.00	1,500.00	0.00	1,500.00
PRINTING	0.00	0.00	1,674.00	0.00	16.20	1,690.20
PHOTOCOPYING	0.00	17.37	243.96	0.00	3.67	265.00
TRAVEL	1.70	311.32	824.63	1,491.54	495.43	3,124.62
COMMITTEE TRAVEL	0.00	483.46	785.53	1,389.69	785.05	3,443.73
EETING EXPENSE	0.00	41.67	0.00	0.00	0.00	41.67
ATERING	0.00	0.00	0.00	13.00	0.00	13.00
RECRUITMENT	0.00	0.00	1,278.06	42.82	0.00	1,320.88
RENT/OCCUPANCY	0.00	0.00	2,432.21	0.00	0.00	2,432.21
MAILING LABELS	0.00	0.00	0.00	179.68	0.00	179.68
DATA PROCESSING	0.00	105.05	0.00	0.00	0.00	105.05
PROJECT COST	0.00	680.00	0.00	0.00	0.00	680.00
TOTAL DIRECT ADMN. COST	461.59	31,564.44	57,064.92	103,127.18	55,826.48	247,844.61
INDIRECT	219.44	13,863.10	25,827.58	59,463.13	32,369.05	131,742.31
TOTAL ADM. COST	\$681.03	\$45,427.54	\$82,892.50	\$162,590.31	\$87,995.53	\$379,586.92
INDIRECT RATE	47.54%	43.92%	45.28%	57.06%	58.16%	

PARTICIPANT EXPENSES:

PERSONNEL	44,916.41	290,581.88	519,749.91	822,429.85	747,914.70	2,425,592.75
STIPEND & FEES	119,000.00	42,000.00	397,636.65	584,722.19	549,808.07	1,693,166.91
DEPARTMENT ALLOWANCE	0.00	0.00	68,000.00	102,000.00	68,000.00	258,000.00
TOTAL PARTICIPANT EXPENSES	\$163,916.41	\$332,581.88	\$985,386.56	\$1,509,152.04	\$1,365,722.77	\$4,376,759.66
TOTAL PROGRAM EXPENSE	\$164,597.44	\$378,009.42	\$1,068,279.06	\$1,671,742.35	\$1,473,718.30	\$4,756,346.56

AMERICAN SOCIETY FOR ENGINEERING EDUCATION
INTERIM FINANCIAL REPORT: 8/1/89-8/30/93

GRANT: N00014-89-J-3204
GRANT PERIOD: 8/1/89-8/30/93
GRANT AMOUNT: \$6,950,307
AMOUNT AVAILABLE: \$6,731,000
ASEE ACCOUNT # PR11

SUMMARY OF EXPENDITURES

PROGRAM EXPENSES

FY89 PROGRAM	164,597.44
FY90 PROGRAM	378,009.42
FY91 PROGRAM	1,068,279.06
FY92 PROGRAM	1,671,742.35
FY93 PROGRAM	<u>1,473,718.30</u>
TOTAL EXPENSES	4,756,346.57

PAYMENTS RECEIVED

VOUCHER #1	252,182.00
VOUCHER #2	98,193.00
VOUCHER #3	98,194.00
VOUCHER #4	98,184.00
VOUCHER #5	368,742.00
VOUCHER #6	212,990.00
VOUCHER #7	149,742.00
VOUCHER #8	149,743.00
VOUCHER #9	149,743.00
VOUCHER #10	591,354.00
VOUCHER #11	372,750.00
VOUCHER #12	238,104.00
VOUCHER #13	238,105.00
VOUCHER #14	238,105.00
VOUCHER #15	693,186.00
VOUCHER #16	327,500.00
VOUCHER #17	<u>630,500.00</u>

TOTAL PAYMENTS RECEIVED	4,907,317.00
TOTAL EXPENSES	<u>4,756,346.57</u>
AMOUNT AVAILABLE	150,970.43

AMERICAN SOCIETY FOR ENGINEERING EDUCATION

DOD GRADUATE FELLOWSHIP

AUTHORIZATION AGREEMENT FOR DIRECT DEPOSIT

I hereby authorize the American Society for Engineering Education, hereinafter called company to initiate credit entries to my checking ☐ savings ☐ account indicated below and the depository named below, hereinafter called depository, to credit the same such account, and, in the event a credit is made to my account in error, I authorize company to make a correcting entry under the condition that I am notified of said adjustment.

ACCOUNT NUMBER: _____ CHECKING ☐ SAVINGS ☐

DEPOSITORY: _____

BANKING TRANSIT NUMBER: _____
(Always 9 Digits)

This authorization is to remain in full force and effect until company has received written notification from me of its termination in such time and in such manner as to afford company a reasonable opportunity to act on it.

SIGNATURE: _____ DATE: _____

STUDENT'S NAME: _____

NOTE: Please include a copy of a void check or deposit slip and return this form to Jeff Jarosz, DOD program manager.

ASEE
1818 N Street NW, Suite 600
WASHINGTON DC 20036

PHONE (202) 331-3525

FAX (202) 265-8504

ASEE



American Society for Engineering Education

MEMORANDUM

FROM: American Society for Engineering Education

TO: Participants in the Department of Defense (DoD) Fellowship Program

SUBJECT: Stipends and Banks

Your monthly stipend will be transferred electronically to your bank on the first working day of the month. You can choose whether the stipend is transferred to a checking account or a savings account. For either type of deposit you must fill out the enclosed "Authorization Agreement for Direct Deposit" and return it to Jeff Jarosz, DoD program manager. In addition, for deposit into a checking account you must include a voided, blank check; and for deposit into a savings account you must include a blank deposit slip. You do not have the option of splitting your stipend between two accounts, nor of receiving your stipend in the form of a "live check" through the mail.

If you have not yet opened an account near your graduate institution, you can wait until you relocate to your graduate institution, open a bank account, and then furnish ASEE with the form and blank check/deposit slip.

PLEASE NOTE: Your first stipend will not be deposited electronically, but will be mailed to you in the form of a "live check". Meanwhile, ASEE's bank will test the information you have provided by attempting to transfer \$0 to your account. If the test is successful, your subsequent stipends will be transferred electronically and ASEE will mail you a non-negotiable monthly statement.

Credit unions often use affiliated banks for electronic transfer services. If you use a credit union, be sure to verify that the 9-digit transit ABA number appearing on your check/deposit slips is the appropriate number for direct deposit transactions.

1818 N Street, N.W.
Suite 600
Washington, D.C. 20036
Main (202) 331-3500
Fax (202) 265-8504

ANALYSIS OF NEW FELLOWS

NAME	UNDERGRADUATE GRADUATE	DISCIPLINE EVALUATION	AGE STATE	RACE SEX	GPA
Anderson, Edward	Stanford	ind engrg	29	white	3.70
Bray, Clark	MIT	exceptional	MI	male	
	Rice	math	23	white	3.79
Brown, Alexander	Stanford	oustanding	TX	male	
	Vanderbilt	ind engrg	23	white	3.97
	Stanford	exceptional	NM	male	
Gottlieb, Sigal	Brown	math	22	white	3.80
	Brown	oustanding	RI	female	
Goyal, Vivek	Univ of Iowa	EE	23	white	4.00
Hildebrandt, Frederic	UC Berkeley	exceptional	IA	male	
	Harvard	math	23	white	3.62
	UC Berkeley	exceptional	CT	male	
Lynn, Lapoe	UC Berkeley	EE	24	white	3.93
	UC Berkeley	N/A	CA	male	
Meshkinpour, Marjohn	UC Berkeley	mat sci	26	white	3.80
	UCLA	oustanding	CA	female	
Moser, Susan	WPI	chem engrg	24	white	4.00
	Cornell	N/A	MA	female	
Paraventi, Denise	Michigan Tech	mat sci	24	white	3.86
	Univ of Michigan	exceptional	MI	female	
Quon, Kenneth	Boston Univ	EE	23	white	3.98
	Stanford	exceptional	CA	male	
Ruark, John	Harvard	ind engrg	23	white	3.81
	MIT	oustanding	IL	male	
Thompson, Dwight	NCSU	EE	23	AA	3.87
	Stanford	oustanding	NC	male	
Trick, Kimberly	Univ of Dayton	mat sci	33	white	3.80
	Univ of Dayton	exceptional	OH	female	